#### **SECTION 16628**

# **ELECTRICAL SERVICES**

# PART 1 DESCRIPTION

# 1.01 INSTALLATION

A. Furnish and install complete and independent points of electrical service.

# 1.02 REMOVAL

A. Remove electrical services.

# PART 2 MATERIALS

- A. Provide materials that comply with the details shown on the plans, the requirements of this Item, and the pertinent requirements of the following Items:
  - 1. Item 16441, "Steel Structures"
  - 2. Item 16445, "Galvanizing"
  - 3. Item 16449, "Anchor Bolts"
  - 4. Item 16618, "Conduit"
  - 5. Item 16620, "Electrical Conductors"
  - 6. Item 16627, "Treated Timber Poles"
  - 7. Item 16656, "Foundations for Traffic Control Devices."
- B. For the installation of electrical services, use new materials that meet the requirements of the NEC, UL, CSA, and NEMA.

# PART 3 CONSTRUCTION

A. Perform work in accordance with the details shown on the plans and the requirements of this Item.

### 3.01 INSTALLATION

A. Ensure components of the electrical service meet the requirements of the Electrical Detail Standards. Follow NEC and local utility company requirements when installing the electrical equipment. Coordinate the utility companies' work for providing service.

# 3.02 REMOVAL

- A. Coordinate removal with the appropriate utility company before beginning work. Before the removal of the electrical service, disconnect and isolate any existing electrical service equipment in accordance with the utility company's requirements.
- B. Use established industry and utility safety practices while removing electrical service equipment near any overhead utilities.
- C. Remove existing electrical service support a minimum of 2 ft. below finish grade unless otherwise shown on the plans. Repair the remaining hole by backfilling with material equal in composition and density to the surrounding area. Replace any surfacing such as asphalt pavement or concrete riprap with like material to equivalent condition.
- D. Disconnect conductors and remove them from the conduit or duct. Cut off all protruding conduit or duct 6 in. below finish grade. Abandoned conduit or duct need not be removed unless shown on the plans.
- E. Reconnect duct cable, conductors, and conduit to be reused when shown on the plans. Make all splices in ground boxes unless otherwise shown on the plans.
- F. Accept ownership of unsalvageable materials, and dispose of them in accordance with federal, state, and local regulations.

# PART 4 MEASUREMENT

A. This Item will be measured by each electrical service installed or removed.

# PART 5 PAYMENT

A. The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Electrical Services" of the types specified or "Remove Electrical Services."

# 5.01 INSTALLATION

A. This price is full compensation for paying all fees, permits, and other costs; making arrangements with the utility company for all work and materials provided by the utility company; furnishing, installing, and connecting all components including poles, service supports, foundations, anchor bolts, riprap, enclosures, switches, breakers, conduit (from the service equipment including the elbow below ground), fittings, conductors (from the service equipment including the elbow below ground), brackets, bolts, hangers, and hardware; and equipment, labor, tools, and incidentals.

#### 5.02 REMOVAL

A. This price is full compensation for coordinating with the utility company to disconnect and isolate the electrical service; removing the service supports; backfilling holes; and equipment, labor, tools, and incidentals.

END OF SECTION